Weekly Surveyor

10 February 1969

CYBERNETICS

Soviets Continue Research on the Electrical Field of the Human Body: Leningrad University scientists at the physiological cybernetics laboratory under the direction of Pavel Gulyayev have registered and measured the electrical field of human muscles and heart. An electrical field is induced in the air around the human body by biocurrents generated by all living tissue. A recording of the field is called the "electroaurogram." It was found that the field's maximum strength coincides with the contraction of a heart's muscle. The strength of the field is increased by physical exercise and emotional stimulation. The complicated nature of the field is correlated with shifts in body posture and even when a subject contemplates a motion. Besides the human, measurements have been made on the bumblebee, mosquito, grasshopper and other insects. A device was developed which can detect very weak electrical fields at a distance up to 25 cm. (Summary World Broadcasts, Second series SU/W5O1, 3 Jan)

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Comment: A first account in TASS of P. Gulyayev's electroaurogram was reported in mid-September 1967. At that time he recorded the human heart at 10 cm. from the chest and frog's nerve impulses at 25 cm. from the skin surface. Gulyayev predicted, at that time, a future development which would permit a recording of the electric field attributable to the action of the brain (EEG). The present report indicates that the Leningrad group has not only enlarged upon its electroaurogram recordings from an increasing variety of living forms but also there appears to be an increase in the sensitivity of the recording apparatus permitting an extension of intervening space from 10 to 25 cm. when recording the human heart electroaurogram.

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Soviet Investigator Records Brain Waves Five Meters Distant From the Subject: Dr. G. A. Sergeyev claims that he can make wireless electroencepholograms (EEG) of subjects located at a remarkable distance from the recording equipment. His results, presented at the First Moscow Session on the Problems of Parapsychology (Jun 68), contradict the traditional assumption that it is impossible to measure emanations of brain waves beyond several millimeters from the head. Swegeyev also noted that his techniques can be used to aid in the selection of persons for telepathic training and in their classification as ESP "emitters" or "receivers." (OOB-321/00222-69, 28 Jan) (C/CD/NDA)

Comment: It has been noted (Surveyor, 28 Jan) that Pavel Gulyayev, of the bio-cybernetics laboratory at Leningrad University, reported electroaurograms (wireless) of the human chest. In 1967 he predicted that brain wave recording without direct electrode contact with the head would become a reality with advanced recording apparatus. is some evidence that Dr. Sergeyev worked with Gulyayev in Leningrad and recently transferred to the Moscow group headed by Edward K. Naumov, Chief of the Department for Technical Parapsychology. Sergeyev has not been described as an authority on parapsychology but rather as a neurocyberneticist who is investigating the physiological behavior exhibited by subjects during the transfer of information by telepathic methods. This report appears to be the first claim of brain wave recording some 15-20 ft distant from the subject and without contact. If corroborated it is quite a breakthrough for one theory of telepathic information transmission. I. M. Kogan reported in "Science and Technology, USSR" (1967), that the most widespread Soviet theory for Psi transmission was the excitation of the electromagnetic field by the biocurrents which accompany all forms of nervous activity. (C/CD/NDA)

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